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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/738,375	12/17/2003	Trey Allen W. Roessig III	AIMI-01994US0	7268
28554	7590	07/26/2005	EXAMINER	
VIERRA MAGEN MARCUS HARMON & DENIRO LLP			CHANG, DANIEL D	
685 MARKET STREET, SUITE 540			ART UNIT	
SAN FRANCISCO, CA 94105			PAPER NUMBER	

2819

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

<b>Office Action Summary</b>	<b>Application No.</b> 10/738,375	<b>Applicant(s)</b> W. ROESSIG ET AL	
	<b>Examiner</b> Daniel D. Chang	<b>Art Unit</b> 2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26-32 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6,12-15,19,20,23 and 24 is/are rejected.
- 7) ☒ Claim(s) 3,5,7-11,16-18,21,22 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/17/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

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***Claim Objections***

Claim 12 is objected to because of the following informalities: on line 2, the recitation, "the decision transistor" appears to be --the decision switch--. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 6, 12-15, 19, 20, 23, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Iroaga et al. (US 2002/0191315 A1, "Iroaga" hereinafter).

Regarding claim 1, Iroaga discloses, in Fig. 2, an actuation circuit having at least a first output (A) and a second output (B), and a first input (205), comprising:

a current sink (206) coupled to the first output (A), the current sink enabled when a current is applied to said first input; and

a decision switch (204) coupled to the current sink (206) and enabling a current path from the first input (205) to the second output (B) when a voltage present at said first output (A) reaches a threshold.

Regarding claim 2, Iroaga discloses, in Fig. 2, that the first output is coupled to a first force pad (A) and the second output is coupled to a second force pad (B).

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Regarding claim 4, Iroaga discloses, in Fig. 2, that the decision switch is a transistor (204).

Regarding claim 6, Iroaga discloses, in Fig. 2, that the transistor is coupled between a current mirror (206, 207) and the input (205).

Regarding claim 12, Iroaga discloses, in Fig. 2, a gain element (213, 220) coupled in series with the decision switch.

Regarding claim 13, Iroaga discloses, in Fig. 2, an apparatus comprising a first (A) and a second (B) force pads, and a control circuit (200) having a first output (A) coupled to the first control pad and a second output (B) coupled to the second control pad, the control circuit, comprising:

- an input (201, 205) having a current coupled thereto:

- a decision transistor (203, 204) coupled to the first output and enabling a current path to the second output; and

- a current sink (206) coupled to the first output.

Regarding the recitation, “a micromechanical mirror structure”, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Regarding claim 14, Iroaga discloses, in Fig. 2, that the current sink (206) is enabled by said current at said input (205).

Regarding claim 15, Iroaga discloses, in Fig. 2, that said current sink (206) is enabled by a voltage at the second output (B).

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Regarding claim 19, Iroaga discloses, in Fig. 2, that the current path is between a first voltage greater than zero and a second voltage greater than zero (see path from 205 to B).

Claims 20, 23, and 24 are essentially the same in scope as claims discussed above and are rejected similarly.

### ***Allowable Subject Matter***

Claims 26-32 are allowable over the prior art.

Claims 3, 5, 7-11, 16-18, 21, 22, and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

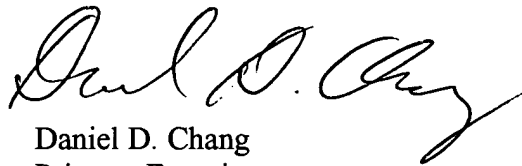
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel D. Chang whose telephone number is (571) 272-1801. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Tokar can be reached on (571) 272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel D. Chang  
Primary Examiner  
Art Unit 2819

dc

**DANIEL CHANG  
PRIMARY EXAMINER**